



NCDOT Rail Division The Rail Report



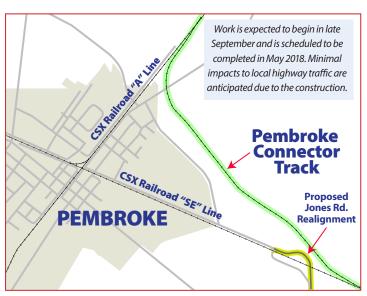
October 2015

Long-needed Infrastructure Projects Start Construction This Fall Improving Railroad Safety, Efficiency and Capacity

Pembroke Connector – Robeson County

The N.C. Department of Transportation awarded a \$10.2 million grading contract to C.M. Lindsay & Sons, Inc., of Lumberton, to create a new 2.4-mile single-track railroad connection in Robeson County. When the grading contract is complete, CSX Transportation will construct the new track and railroad signals. The project will connect the CSX A-line (north-south railroad line) and CSX SE-line (east-west rail line) just north of Pembroke.

This new connection will allow freight trains a direct connection between Wilmington, Fayetteville and points north. The new line will bypass Pembroke to the north, alleviating freight congestion and creating a safer and more efficient route for both general freight trains and military equipment moves that frequently travel through the area.



Sugar Creek Road Grade Separation Project in Charlotte



NCDOT Visualization of Sugar Creek Road Grade Separation

The Sugar Creek Road grade separation project is part of a series of upgrades to the North Carolina Railroad (NCRR) from Raleigh to Charlotte. This rail corridor is one of the busiest sections in the state, currently hosting more than 30 Norfolk Southern Railroad freight trains and eight Amtrak trains per day.

Completion of this \$17 million project, which is funded by the NCDOT, FRA, NCRR, NS and City of Charlotte, will reduce the risk of train/vehicle collisions, improve safety for both vehicle and rail passengers, and reduce traffic congestion in the area.

The project will include permanently closing the existing Craighead Road railroad crossing and constructing a bridge carrying Sugar Creek Road over the existing and future railroad tracks. North Davidson Street will be realigned to the intersection of Sugar Creek Road and Redwood Avenue and the intersection improved. Bearwood Avenue will be extended under the proposed Sugar Creek Road bridge to a new intersection with the realigned N. Davidson Street. A new connector road will be constructed from the existing Greensboro Street/East Sugar Creek Road intersection to Raleigh Street, east of the proposed Sugar Creek Road bridge and the existing Northmore Street/Sugar Creek intersection will be removed.

Work on the grade separation project can begin as soon as October 1. During construction, Sugar Creek Road will be closed from Greensboro Street to Redwood Street. A signed detour route will direct northbound traffic to Eastway Drive, then to Tryon Street. The detour will be reversed for southbound traffic. Sugar Creek Road will not close until the new Eastway Drive bridge reopens.

Charlotte Area Transit Systems (CATS) will close Sugar Creek Road initially for its Blue Line Extension project. After the BLE work is completed, NCDOT will maintain the road closure for its grade separation project.

All work on the grade separation project, except reforestation, is scheduled for completion in September 2018. Blythe Development Company of Charlotte is the project contractor.



CLNA's New Rocky Mount Transload Facility offers Local Companies more Shipping Options

The Carolina Coastal Railway (CLNA) has partnered with the NCDOT Rail Division to construct an approximately 2,000 foot-long spur and transload facility. The recently completed project is in the CLNA yard adjacent to the CSXT yard in Rocky Mount. The grant was provided to CLNA from the Freight Rail & Rail Crossing Safety (FR&RCSI) funds, to create improved access to the railroad network for local industrial users. The initial products handled at the transload facility will include dried distillers grain and whole logs for construction of log homes. Additional business users are being contacted regarding the potential

of the facility. CSXT is working with CLNA to direct additional users to

Carolina Coastal Railway

NCDOT officials visit Vertex plant

the facility.



Secretary Nick Tennyson, Interim Deputy Secretary Keith Weatherly, Rail Director Paul Worley and other state officials visited the Vertex plant for a tour, and to review current design plans and see a fullscale prototype for safety tank cars that will be built at the plant in Wilmington. They estimate the plan will produce 1,400 cars in their first year of operation, and 4,500 in the second year.

NCDOT Rail Division Contractors Participate in EPA's Southeastern Diesel Collaborative



Lynn Harris

On July 17th-19th Lynn Harris from McDowell Engineers, and Dr. Chris Frey from NCSU, attended the 10th annual Southeast Diesel Collaborative (SEDC) in Atlanta, GA, sponsored by the Environmental Protection Agency (EPA) Region 4 office, which serves North Carolina and neighboring states. The conference was attended by representatives of various state agencies, natural gas/alternative fuel vendors, and

several major companies including Volvo and Delta Airlines.

The purpose of the conference was to discuss opportunities for air pollution reduction, with focus on vehicle engine emissions reductions. Lynn Harris gave a presentation regarding the NCDOT Rail Division's current and future emissions improvement projects, with focus on biodiesel fuel testing and the upcoming catalytic reduction system implementation, known as a Blended Aftertreatment System (BATS). Details included a summary of how biodiesel fuel blends have been tested successfully in NCDOT's locomotives from 2011-14, with significant improvement in engine emissions as determined by the NC State Environmental Engineering Department, and also no loss of fuel economy, engine performance, or increased fuel costs. Additional information was provided regarding the Rail Division's plans to implement the BATS emissions aftertreatment system onto one locomotive, which will be the first ever operational system in revenue

service on an F59PH locomotive.

Dr. Frey followed with more detailed results on the specific reduction of different types of pollutants from biodiesel fuel vs. standard locomotive diesel fuel. NCDOT's efforts and proactive approach to emissions improvements have brought attention to the important role that passenger rail agencies serve in proving new technologies.



Dr. Chris Frey

Lynn has been invited to participate in future discussions regarding opportunities for air quality improvement in the transportation industry.



Emissions testing demonstration at NCDOT Rail Maintenance Facility.

North Carolina's Amtrak will "drop you off at the Front Door" for the N.C. State Fair and the Lexington BBQ Festival

N.C. State Fair, October 15-25, 2015, where "Nothing Could Be Finer!"



than getting off the *Carolinian* across the street from Gate 1 and spending the day sampling food, rides and exhibits.

Be sure to visit NCDOT's BeRailSafe booth located in Safety City at the NC State Fair for giveaways and to learn more about rail safety.

Use station code NSF for this special stop at the fairgrounds which begins October 16.

The 32nd Annual Lexington Barbecue Festival, Saturday October

24. North Carolina's Amtrak makes special stops that day in downtown in the center of the action.

Use station code LEX when booking your ticket.



Hop on Board the Piedmont to the Carolina Panthers Game

North Carolina's Amtrak provides a convenient way to watch the Carolina Panthers play, without the hassle of driving and parking.



Piedmont 73 departs the Raleigh Amtrak station at 7 a.m. on game days with stops in Cary, Durham, Burlington, Greensboro, High Point, Salisbury and Kannapolis before pulling into the Charlotte

Amtrak Station at 9:55 a.m. This arrival time leaves plenty of opportunity for grabbing a bite to eat or checking out the tailgating scene prior to the 1 p.m. game!

Visit www.ncbytrain.org for details on transportation between the Charlotte Amtrak Station and the stadium and to book your ticket.

The *Piedmont* train schedule coincides with the remaining 1 p.m. home games this season:

November 8, November 22, December 13, January 3

Taking Pictures on Railroad Tracks is Dangerous - and Illegal

The N.C. Department of Transportation Rail Division's BeRailSafe program advises individuals and professional photographers to stop taking photographs on railroad tracks, property and equipment. There are



both safety and legal reasons for this message:

- Railroad tracks are not safe. Train schedules vary widely, so you should
 expect a train to come along at any time, day or night. Trains cannot
 stop quickly, so you are in serious danger of being severely injured or
 killed if you cannot get out of their way in time.
- In recent years, there have been too many instances nationwide
 of photographers and subjects being struck and killed by trains
 during photo shoots. As recently as July 25 of this year, a professional
 photographer was killed by a train in Fresno, California, during a photo
 shoot.
- Railroad tracks and equipment are private railroad company property and trespassers can be charged with a misdemeanor.

This message is especially important at this time of year, when many high school students, often graduating seniors, take yearbook portraits. High school yearbook staff advisers are asked to notify students and professional photographers of the dangers involved in taking photographs on or near railroad tracks and advise them that any such portraits will be rejected.

"By not rejecting railroad-background pictures, schools only encourage other people, including young children and teens, to believe that railroad tracks are safe places to be if they do not hear or see a train close by," said Paul Worley, Rail Division Director. "We need to realize that these pictures, whether in a yearbook or on social media, are extremely dangerous, irresponsible, and unacceptable."

Though they are on the rise, trespassing deaths and injuries in North Carolina are completely avoidable if you stay off the tracks or only cross tracks at designated locations such as highway grade crossings, underpasses and bridges.

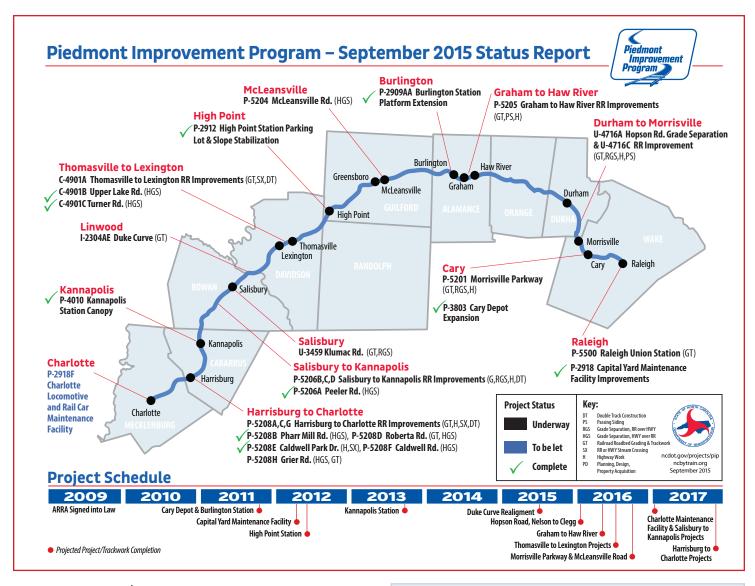
Lifesaver, railroads and other safety stakeholders in programs to educate children, teens and adults on the dangers of trespassing on railroad tracks, property and equipment.

Ridership & Revenue on NC's Amtrak Service – *July 2015 vs. 2014

inai eSe	RIDERSHIP			REVENUE		
1771 \$3\$	2015	2014	% +/-	2015	2014	% +/-
Piedmont	14,270	13,977	2%	\$278,597	\$276,516	1%
Carolinian	29,357	29,583	-1%	\$2,072,062	\$2,134,922	-3%

Hours Volunteered by N.C. Train
Hosts in August, supporting North
Carolina's Amtrak onboard trains
and at events.

*July 2015 service modifications and annulments impacted two trains due to PIP construction. Two *Piedmont* trains, 74 and 75, were annulled on July 20. In 2014, Trains 74 and 75 were annulled on July 24, and Trains 79 and 80 did not operate between Charlotte and Raleigh. Looking ahead: Four to five service disruptions impacting midday trains are expected between September and December 2015. Additional analysis finds high correlation between lower retail gas prices and drops in *Piedmont* ridership.



Spent to Date of \$520M (eff. 8/31/2015)

Component	Expenditure
PD&A/ROW	\$47,536,448
Equipment Procurement & Rebuild	\$26,933,812
Stations & Facilities	\$38,315,218
Track & Structures	\$ 196,618,009
CRISP	\$2,180,376
Program Totals	\$311,583,863

Four new contracts totaling \$190,981 were awarded in August.

Commitments to Date of \$520M (eff. 8/31/2015)

Current Commitments				
Pending Commitments Anticipated Date				
	Charlotte Maintenance Facility Construction 3/16			
	PIDS Construction	1/16	\$1.5M	
	PD&A	Through '16	\$8.2M	
Ba	lance		\$6.3M	

PIP Milestones

Salisbury – Track construction has started across Klumac Road bridge.

Lexington – On August 31, the first new main track was put into service across the new Hamby Creek railroad bridge within the Bowers to Lake double track project. This final track relocation will facilitate the completion of the adjacent second main track in this area.

Charlotte – At the Grier Road grade separation project within the Haydock to Junker double track, the first new main track was put into service on August 31. The permanent relocation of the track facilitates the completion of the overpass bridge and the adjacent second main track in this area.



Piedmont Improvement Program and Congestion Mitigation Project Photos August 2015



Congestion Mitigation Project, installation CP Armstrong turnouts



P-5201 Morrisville Parkway, bridge construction



U-4716 Nelson to Clegg Passing Siding, final phase grade



P-5205 Graham to Haw River Passing Siding, grading for new alignment



C-4901 Bowers to Lake, Rich Fork Creek bridge work



U-3459 Klumac Road, bridge ready for track

Piedmont Improvement Program Project Photos August 2015



P-5206 Reid to North Kannapolis, grading near Peeler Road



P-5208 Haydock to Junker, Arch culvert construction



P-5208A Haydock to Junker, track construction



P-5208 Haydock to Junker, Roberta Road bridge construction



P-5500C Tryon Siding, track construction



P-5500C Tryon Siding, roadbed ready for track construction